AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of making a transistor having first and second electrodes, a semiconductive layer, and a dielectric layer; said semiconductive layer comprising a semiconductive polymer and said dielectric layer comprising an insulating polymer; characterised in that said method comprises the steps of:

(i) depositing on the first electrode a layer of a solution ~~containing~~, said solution comprising material for forming the semiconductive layer and material for forming the dielectric layer; and

(ii) optionally curing the layer deposited in step (i);

wherein, in step (i), the solvent drying time, the temperature of the first electrode and the weight ratio of (material for forming the dielectric layer): (material for forming the semiconductive layer) in the solution are selected so that the material for forming the semiconductive layer and the material for forming the dielectric layer phase separate by self-organisation to form an interface between the material for forming the semiconductive layer and the material for forming the dielectric layer.

2. (original): A method according to claim 1, wherein the weight ratio of (material for forming the dielectric layer): (material for forming the semiconductive layer) is in the range of from 0.5 to 2.

3. (previously presented): A method according to claim 1, wherein the solvent drying time is in the range of from 0.1 to 100s.

4. (currently amended): ~~A method according to claim 1~~ A method of making a transistor having first and second electrodes, a semiconductive layer, and a dielectric layer; said semiconductive layer comprising a semiconductive polymer and said dielectric layer comprising an insulating polymer; characterised in that said method comprises the steps of:

(i) depositing on the first electrode a layer of a solution, said solution comprising material for forming the semiconductive layer and material for forming the dielectric layer; and

(ii) optionally curing the layer deposited in step (i);

wherein, in step (i), the solvent drying time, the temperature of the first electrode and the weight ratio of (material for forming the dielectric layer): (material for forming the semiconductive layer) in the solution are selected so that the material for forming the semiconductive layer and the material for forming the dielectric layer phase separate by self-organisation to form an interface between the material for forming the semiconductive layer and the material for forming the dielectric layer,

wherein the material for forming the dielectric layer is mixed with the material for forming the semiconductive layer in the solution.

5. (original): A method according to claim 4, wherein the material for forming the dielectric layer comprises oligomers and/or monomers for forming the insulating polymer and the material for forming the semiconductive layer comprises a semiconductive polymer and/or oligomers for forming the semiconductive polymer.

6. (original): A method according to claim 4, wherein the material for forming the dielectric layer comprises an insulating polymer and the material for forming the semiconductive layer comprises a semiconductive polymer and/or oligomers for forming the semiconductive polymer.

7. (previously presented): A method according to claim 1, wherein the material for forming the semiconductive layer and the material for forming the dielectric layer comprises a diblock polymer, said polymer comprising a semiconductive block for forming the semiconductive layer and a dielectric block for forming the dielectric layer.

8. (previously presented): A method according to claim 1, wherein the material for forming the semiconductive layer comprises one or more aromatic or heteroaromatic structural units.

9. (original): A method according to claim 8, wherein the one or more aromatic or heteroaromatic units independently are selected from the group consisting of fluorenedyil, phenylene, phenylene vinylene, triarylamine, thiophenediyl, thiophene, oxadiazole and benzothiadiazole.

10. (previously presented): A method according to claim 1, wherein the material for forming the dielectric layer comprises crosslinkable groups.

11. (previously presented): A method according to claim 1, wherein the material for forming the dielectric layer comprises one or more units having a low cohesive-energy density.

12. (original): A method according to claim 11, wherein the one or more units having a low cohesive-energy density are selected from the group consisting of siloxane, perfluoroalkyl, perfluoroarylene ether, perfluoroalkylene ether.

13. (previously presented): A method according to claim 11, wherein the material for forming the dielectric layer has a surface tension in the range of from 15 to 35 dyn/cm.

14. (previously presented): A method according to claim 1, wherein the transistor is in top-gate configuration.

15. (previously presented): A method according to claim 1, wherein the transistor is in bottom-gate configuration.

16. (original): A method according to claim 15, wherein the material for forming the dielectric layer comprises one or more units having high affinity for the first electrode.

17. (original): A method according to claim 15, wherein the first electrode is surface treated prior to step (i) with a material containing one or more units having high affinity for the first electrode.

18. (previously presented): A method according to claim 1, wherein the thickness of the dielectric layer is below 400nm.

19. (previously presented): A method according to claim 1, wherein the thickness of the semiconductive layer is in the range of 10nm to 300nm.

20. (previously presented): A method according to claim 1, wherein the transistor is a field-effect transistor.

21. (previously presented): A method according to claim 1, wherein the transistor is a phototransistor.

22. (previously presented): A transistor obtainable by the method as defined in claim 1.

23. (currently amended): A method of making an electronic or optoelectronic device comprising a transistor made according to the method of claim 4 ~~having first and second~~

~~electrodes, a semiconductive layer, and a dielectric layer; said semiconductive layer comprising a semiconductive polymer and said dielectric layer comprising an insulating polymer; characterised in that said method comprises the steps of:~~

~~(i) depositing on the first electrode a layer of a solution containing material for forming the semiconductive layer and material for forming the dielectric layer; and~~

~~(ii) optionally curing the layer deposited in step (i);~~

~~wherein the solvent drying time, the temperature of the first electrode and the weight ratio of (material for forming the dielectric layer): (material for forming the semiconductive layer) in the solution are selected so that the material for forming the semiconductive layer and the material for forming the dielectric layer phase separate by self-organisation to form an interface between the material for forming the semiconductive layer and the material for forming the dielectric layer~~.

24. (original): A method according to claim 23, wherein the electronic or optoelectronic device comprises an RF tag, electronic paper, chemical sensor, logic circuit, amplifier, or driver circuit.

25. (previously presented): An electronic or optoelectronic device obtainable by the method as defined in claim 23.

26. - 33 (cancelled)